

NO 1-56  
AMPLIFIER  
1126A

10-10-40

**GENERAL**

This Program Operated Level Governing Amplifier is comprised of one 126A Amplifier, one 298A Control Panel and one 20A Rectifier. The Rectifier is described on Commercial Products Apparatus Reference Sheet No. 7-3. The Polga is intended to be used as part of the speech input equipment in broadcast stations to increase the average modulation and prevent extra band radiation. The units comprising the Polga are of recessed panel construction suitable for relay rack mounting, and are factory assembled and wired for mounting as a unit assembly. Where desired they may be mounted as separate units.

**ELECTRICAL CHARACTERISTICS**

- Gain - - - - - 53.4 db working from 600 ohms into 600 ohms, all attenuators out.
- Operates From - - - - - 600 ohms
- Internal Input Impedance - - - - - 600 ohms
- Operates Into - - - - - 600 ohms
- Internal Output Impedance - - - - - 600 ohms with normal use of fixed attenuators
- Output Power - - - - - +26 vu with output attenuators all out.
- Output Distortion - - - - - Less than .7% for single frequencies below the limiting point, and less than 1% for single frequencies up to 5 db beyond the limiting point.
- Output Noise - - - - - 45 db below .001 Watt unweighted.
- Power Supply - - - - - 126A Amplifier, 275 Volts, .060 Amps. d-c; 298A Control Panel 6.3 volts, .3 amperes, 60 cycles a-c. 20A Rectifier 115 volts, .74 amperes, 60 cycles a-c. (20A Rectifier should be fused with a 1 ampere Fustat.)
- Input Gain Control - - - - - Variable in steps of 0.5 db over a range of 15 db. Additional fixed attenuators provide a variation of 35 db in 5 db steps.
- Output Gain Control - - - - - Variable in steps of 0.1 db over a range of 3 db. Additional fixed attenuators provide a variation of 25 db in 1.5 db steps, with an intermediate step of 6.5 db which is normally required in the output circuit.
- Limiting Range - - - - - The output is held to a total increase of 2.5 db for an increase of 25 db. For any further input increase the limiter functions as a peak chopper.
- Recovery Time - - - - - Variable in 5 steps of from .20 to 1 second to suit reverberation and program characteristics.

**EQUIPMENT CHARACTERISTICS**

- Dimensions - - - - - See Photograph
- Weight - - - - - 126A Amp. 14 Lbs. 298A C.P. 9 Lbs. 20A Rect. 26 Lbs.
- Mounting - - - - - Recessed panel type for vertical mounting on a standard 19" relay rack
- Chassis Finish - - - - - Bright Aluminum Lacquer
- Mat Finish - 126A Amp. - - - - - Black Japan - - - Code 126A-3  
Aluminum Grey - - - Code 126A-15
- 298A C.P. - - - - - Black Japan - - - Code 298A-3  
Aluminum Grey - - - Code 298A-15
- 20A Rect. - - - - - See Apparatus Reference Sheet

**VACUUM TUBES (Must be ordered separately)**

Metal	Class	
Two - 16L2	-	One No. 46 Mazda Lamp
Two - 6J7	or	Two 6J7-G
Two - 6J5	or	Two 6J5-G
One - 6H6	or	One 6H6-G

**REFERENCES**

- ESA-746581 1000 Cycle Load and Distortion Characteristic.
- ESA-746576 Overall Frequency Characteristic.
- ESA-746583 Distortion Characteristic at 5 Freq.
- ESX-676724 Schematic of 126A Amp. and 298A-C.P.
- ESR-676917 Interconnecting Diagram.
- ESX-676708 126A Amplifier Wiring Diagram.
- ESR-676717 298A Control Panel Wiring Diagram.
- Instruction Bulletin No. 1000
- Photographs Nos. 91339, 91340





